

MECHANICAL CHARACTERISTICS	
INTERFACE	MIL-STD-348, FIGURE 310-1
IN ACCORDANCE WITH THE INTENT OF SLANT SHEET	MIL-PRF-39012/55 REF.
RECOMMENDED MATING TORQUE	9 IN-LBS. NOM.
COUPLING PROOF TORQUE	15 IN-LBS. MIN.
COUPLING NUT RETENTION	60 LBS. MIN.
FORCE TO ENGAGE	2 IN-LBS. MAX.
FORCE TO DISENGAGE	2 IN-LBS. MIN.
DURABILITY	500 CYCLES MIN.
AXIAL CONTACT RETENTION (FROM INTERFACE)	6 LBS. MIN.
AXIAL CONTACT RETENTION (FROM CABLE)	6 LBS. MIN.
CABLE RETENTION	20 LBS.
MASS	7.74 GRAMS NOM.
ELECTRICAL CHARACTERISTICS	
IMPEDANCE	50 Ohms NOM.
MAXIMUM FREQUENCY	18 GHz
VSWR DC - 12.4 GHz	1.12:1 MAX.
12.4 - 18 GHz	1.16:1 MAX.
INSERTION LOSS	0.04 \sqrt{f} (GHz) dB MAX.
DIELECTRIC WITHSTANDING VOLTAGE	750 Vrms MIN.
INSULATION RESISTANCE	5000 MegaOhms MIN.
RF LEAKAGE DC - 18 GHz	-90 dB MIN.
CORONA	200 Vrms MIN. @ 70,000 FEET
RF HIGH POTENTIAL	500 Vrms MIN.
CONTACT RESISTANCE (INNER)	4.0 MilliOhms MAX.
CONTACT RESISTANCE (OUTER)	2.0 MilliOhms MAX.
ENVIRONMENTAL CHARACTERISTICS	
OPERATING TEMPERATURE	-100 °C TO 150 °C
VIBRATION	MIL-STD-202, METHOD 204, CONDITION D
MECHANICAL SHOCK	MIL-STD-202, METHOD 213, CONDITION I
THERMAL SHOCK	MIL-STD-202, METHOD 107, CONDITION B
CORROSION	MIL-STD-202, METHOD 101, CONDITION B, 5%
MATERIALS AND FINISH	
MAIN BODY, LOCKING SLEEVE, COUPLING NUT	STEEL, CORROSION RESISTANT, ASTM-A-582, UNS NO. S30300, PASSIVATED PER ASTM-A-967
REAR BODY, CONTACT	BERYLLIUM COPPER, ASTM-B-196, GOLD PLATED PER MIL-DTL-45204, OVER NICKEL PLATE PER AMS-QQ-N-290
SNAP RING	BERYLLIUM COPPER, PER ASTM-B-197
INSULATOR	TFE FLUOROCARBON PER ASTM-D-1710
DIELECTRIC BEAD(S)	POLYETHERIMIDE THERMOPLASTIC, PER ASTM-D-5205
SPRING	316BRT STAINLESS STEEL, PASSIVATED PER ASTM-B-967
APPLICATION	
CABLE(S)	142 SERIES
INSTALLATION	PER CONFIGURATOR

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MATING CONNECTOR REQUIREMENTS

SCALE: 3:1

SCALE: 6:1

BODY MATERIAL: STEEL OR BeCu

NOTE:

- MARKER LOCATION ON THIS DRAWING IS FOR REFERENCE ONLY AND IS SUBJECT TO CHANGE WITHOUT NOTICE.
- DIMENSION VALUE BASED ON SLEEVE IN LOCKED POSITION.

1.9 MAX
FOR ROUTING PURPOSES
CABLE BEND STARTS
AT END OF HEAT SHRINK
(NOTE 1)

Ø.20 REF.
(NOTE 1)

Ø.24 REF.
(NOTE 1)

SHRINK
SLEEVE(S)

MICRO-COAX
UTIFLEX® 142
SERIES CABLE

Ø.020 REF.
TYP. (2X)
VENT HOLES

.312 HEX
REF.

.250 HEX
REF.

.545 REF.

.800 REF.

.125 REF.

.458 REF.
(NOTE 2)

.599 REF.
(NOTE 2)

.281 REF.

.348 REF.
(NOTE 2)

DETAIL A
SCALE 8 : 1

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		DWN. PLM	05/21/12
		CHKD. CCF	05/22/12
		APPVD.	
TOLERANCES UNLESS OTHERWISE SPECIFIED		TITLE SMA PLUG, MITER RIGHT ANGLE, SELF-LOCKING, REMOVABLE SLEEVE, VENT HOLES, 142 SERIES, SPACE GRADE	
XX	± .02	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED. SCREW THDS. TO BE IN ACCORD WITH ANSI B1.1-1989.	
.XXX	± .005		
.XXXX	± .0010		
ANGLES	±2°		
		FSCM NO.	SIZE
		64639	B
		SCALE	SHEET NO.
		4:1	1 OF 1
		DRAWING NO.	SD905194
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SPECIFICATION DRAWING

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